

RADIO-LOUD POPULATION A QUASARS AT HIGH REDSHIFT

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Different properties of quasars may be observed and analysed through the many ranges of the electromagnetic spectrum. Pioneering studies showed that an “H-R diagram” for quasars was needed to organize these data and a four-dimensional Eigenvector (4DE1) parameter space was proposed. The 4DE1 “optical plane”, also known as the quasar Main Sequence (MS), present different spectral types in order to describe a consistent picture of QSOs. Moreover, the MS makes use of independent observational properties obtained from the optical and UV emission lines, as well as from the soft-X rays. In this work we present measured properties in the optical and UV regions of a sample of 22 quasars at high redshift ($z=2-4$) observed in the infrared at VLT/ESO, and with additional measures in UV we obtained through the fitting of the SDSS spectra. We will present a special analysis of the radio-loud sources in the sample and in particular focusing on the strong radio-loud of population A quasars. Spectral analysis was performed through the non-linear multicomponent decomposition of the line profiles. The considered radio-loud sources present very small blueshifted component, at variance with radio-quiet Pop. A quasars of comparable luminosity. The strongest radio emitters are also found with the more symmetric $H\beta$ profiles. Results are show in order to identify the location of the sources within the Main Sequence, and highlight the effects of the radio-loudness on their emission line properties.